

Weatherization Spans the Efficiency Spectrum in Illinois

Illinois experiences a broad spectrum of weather conditions: snowy winters with frigid temperatures and bitter winds, and summers characterized by high heat and humidity. Residents rely heavily on their heating and cooling systems to keep their homes comfortable. However, many low-income families suffer throughout the year because they cannot afford to heat and cool their homes adequately. To address this situation, Illinois partners with the U.S. Department of Energy (DOE) to deliver the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for others. This burden becomes more unmanageable when energy prices soar. Low-income families often cut back on other necessities to pay their energy bills. Weatherization reduces home energy consumption, which provides a permanent boost to the household's budget.

Illinois' Department of Commerce and Community Affairs administers the program and a network of 36 local agencies delivers energy efficiency services to eligible residents across the state. Professionally trained staff use computerized energy audits and advanced diagnostic equipment to determine the most cost-effective energy efficiency measures appropriate for each home. Illinois crews also test heating units and appliances for carbon monoxide leaks and combustion safety.

Typical weatherization services include installing insulation; sealing ducts; and mitigating heat loss through windows, doors, and other infiltration points. Illinois also installs health and safety measures, such as carbon monoxide detectors, smoke detectors, and fire extinguishers. Clients are educated on the proper use and maintenance of the installed measures.

NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000

ILLINOIS

Homes weatherized in 1999 (with DOE \$)	1,830
DOE funding in 1999	\$8.1 million
Clients served in 1999	3,110
Elderly	26%
People with disabilities	29%
Families with children	43%

EXPANDING THE SCOPE

Illinois continues to expand its Weatherization Program through innovative approaches and creative partnerships. In 2000, Illinois distributed a comprehensive handbook of Weatherization Standards to ensure uniform implementation across the state. Illinois is now developing a new energy audit tool with the capability to audit several building types, including single-family and multi-family homes. This audit tool will enable agencies to serve a broader range of households.

Illinois has also expanded Weatherization through a collaboration between the Chicago Housing Authority and DOE to create the Home Energy Savings Corporation (HESC). HESC is a resident-owned business comprised of 33 low-income residents who received weatherization training and certification. During the training program, the participants weatherized approximately 300 townhomes in a low-income Chicago community. This groundbreaking program helps individuals and the community by providing vital energy services to low-income households and by empowering residents with practical knowledge and marketable skills.

BROAD RANGE OF BENEFITS

Weatherization creates important economic benefits for low-income households. Illinois' program produces average energy savings of 25% per home weatherized. This benefits the community by keeping money in the local economy that would typically be exported out to pay for energy.

Weatherization crews safeguard the health and safety of the low-income families they serve. Dana Winnow*, a single mother from Hurst, was using the kitchen's gas stove to provide heat for her children after the furnace broke. This ineffective and dangerous practice put her children at risk of carbon monoxide poisoning and fires. Weatherization replaced the furnace, repaired the broken doors, and insulated the house. Dana is relieved that her children now have a safe, warm home.

Clients like Dana are often hesitant to ask for assistance, concerned that it will look like a handout. Weatherization really provides a hand-up for low-income families and helps them become self-sufficient. Sherry Lawson*, a disabled client from DeKalb, was apprehensive about being "invaded" by the weatherization crew. After the weatherization work

was complete, she commented, "They were thorough, friendly, and at no time did I feel degraded...thanks for perking me up, making me a believer in people again, and most importantly, for helping my heating bills. Please know that some of us out here do not expect to get a free ride, and are very appreciative of the work you do."



A weatherization technician illustrates a common point of air infiltration, an open chimney bypass. The crew will seal the bypass and insulate the area to reduce heat loss.

Reducing residential energy demand decreases electricity generation and associated power plant emissions, a significant source of air pollution.

Helping low-income families lower their energy consumption improves local air quality and reduces adverse health effects, particularly asthma. This is particularly important in Illinois. Known as the "Industrial Belt," Illinois' high concentration of factories compromises the state's air quality.

WEATHERIZATION WORKS!

Weatherization produces an impressive array of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Illinois and America!

**Names have been changed to protect the privacy of the subjects.*



TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

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Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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